



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,957	10/16/2001	Brian James Misek	10010215-1	7262

7590 08/09/2005
AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER

LUU, THANH X

ART UNIT	PAPER NUMBER
----------	--------------

2878

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,957

Applicant(s)

MISEK, BRIAN JAMES

Examiner

Thanh X. Luu

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,5-8,11,14-17 and 22-31 is/are pending in the application.
4a) Of the above claim(s) 31 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 3,5-8,11,14-17 and 22-30 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to amendments and remarks filed July 25, 2005.

Claims 3, 5-8, 11, 14-17 and 22-31 are currently pending.

Claim 31 is withdrawn.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 3, 5, 11, 14 and 22-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Yonemoto et al. (U.S. Patent 6,166,769).

Regarding claims 3, 5, 11, 14 and 22-30, Yonemoto et al. disclose (see Fig. 4) a system comprising: an array of photocells (32) that are arranged in rows and columns, and a sequential readout circuit for sequentially reading out the value of the photocells one photocell at a time, wherein the readout circuit includes: a first sampling circuit (38, 38') that includes a first electrode (electrode of 38 near 37) for coupling to a first column and a second electrode (electrode of 38 near 39); a first switch (39) that includes a first electrode coupled to the second electrode of the first sampling circuit, a second electrode, and a third electrode (gate) for receiving a first sample control signal; wherein the first switch selectively couples the first electrode of the first switch to the second

electrode of the first switch when the first sample control signal is asserted; wherein the first sampling circuit samples a light signal and a reset signal from each photocell in the first column; a second sampling circuit and second switch (see elements in adjacent column, not labeled) as claimed; and an amplifier (43) that includes a negative input terminal coupled to the second electrode of the first and second switches; wherein the amplifier includes an output terminal for generating a signal that corresponds to the amount of light received by a particular photocell in the array. Yonemoto et al. also disclose (see Fig. 4) determining a difference (47) between the light signal and the reset signal, and an integration capacitor (44) as claimed. Yonemoto et al. further disclose (see Fig. 4) the sampling circuit includes a sampling capacitor (38 or 38').

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6, 7, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yonemoto et al. in view of Simerly et al. (U.S. Patent 5,982,424).

Regarding claims 6, 7, 15 and 16, Yonemoto et al. disclose the claimed invention as set forth above. Yonemoto et al. do not specifically disclose a level shifting or gain manipulation circuit as claimed. Simerly et al. teach (see col. 7, lines 35-47) level shifting and gain manipulating in a similar system. Simerly et al. further recognize that level shifting and gain manipulation accounts for variations in dynamic ranges among

frames. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a configuration in the apparatus of Yonemoto et al. in view of Simerly et al. to improve detection as taught.

5. Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yonemoto et al. in view of Krymski (U.S. Patent 6,222,175).

Regarding claims 8 and 17, Yonemoto et al. disclose the claimed invention as set forth above. Yonemoto et al. do not specifically disclose a photocell circuit as claimed. Krymski teaches (see Fig. 4) a photocell circuit (50) as claimed. Krymski recognizes that such a configuration is conventional and well known in the art. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a configuration in the apparatus of Yonemoto et al. in view of Krymski to obtain active pixel readout and improve detection.

Response to Arguments

6. Applicant's arguments filed July 25, 2005 have been fully considered but they are not persuasive.

Applicant asserts that the elements 38 and 38' of the prior art do not teach a first sampling circuit as claimed. Examiner disagrees. Applicant first states that elements 38 and 38' do not teach the first sampling circuit. However, Applicant subsequently then argues that 38 or 38' taken separately do not each the claimed invention. Since 38 and 38' taken together forms a first sampling circuit that samples both a light signal and a reset signal as claimed, as understood, the claimed invention remains anticipated by the prior art.

Applicant further asserts that elements 39 and 39' of the prior art do not teach the amplifier configuration as claimed. However, nowhere in the rejection has the Examiner indicated element 39'. The rejection states that the second sampling circuit and second switch is "(see elements in adjacent column, not labeled)." That is, the second switch, not labeled, is the switch in the next column that corresponds to the first switch 39. Subsequently, as clearly shown in the figure, that second switch is connected to the negative input terminal of the amplifier as claimed.

Applicant's assertion towards method claim 31 is irrelevant since that claim has been withdrawn.

Thus, as set forth above, this rejection is proper.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the

Art Unit: 2878

examiner should be directed to Thanh X. Luu whose telephone number is 571-272-2441. The examiner can normally be reached on M-F 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thanh X Luu
Primary Examiner
Art Unit 2878

08/2005